Corylus cornuta - Amelanchier spp. - Prunus virginiana Rocky Shrubland

COMMON NAME	Beaked Hazelnut - Serviceberry species - Choke Cherry Rocky Shrubland
SYNONYM	Boreal Hazelnut - Serviceberry Rocky Shrubland
PHYSIOGNOMIC CLASS	Shrubland (III)
PHYSIOGNOMIC SUBCLASS	Deciduous shrubland (III.B)
PHYSIOGNOMIC GROUP	Cold-deciduous shrubland (III.B.2)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (III.B.2.N)
FORMATION	Temperate cold-deciduous shrubland (III.B.2.N.a)
ALLIANCE	CORYLUS CORNUTA - AMELANCHIER SPP. SHRUBLAND ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 3

USFWS WETLAND SYSTEM TERRESTRIAL

RANGE

Isle Royale National Park

This community is fairly common on ridges and rocky summits throughout the park.

Globally

This association is found in Michigan and Ontario.

ENVIRONMENTAL DESCRIPTION

Isle Royale National Park

This community occupies exposed ridges and rocky summits. This community often has evidence of past fires; it is likely a successional stage following a severe burn. It seems to be an intermediate successional stage after Poverty grass barrens, and gradually developing into a woodland. Soils are often very shallow, and successional development is very slow on the exposed rocky summits where this community is found; so the community may be a fairly long-lived and stable successional stage.

Globally

This type occurs on a wide variety of slopes, soils, topographic positions and moisture regimes. It typically arises because of natural or human disturbance, most commonly beavers, fire, logging and blow down. This community can also occur without disturbance, usually on dry rock ridgetops that have thin, acidic soils. These sites, however, are usually so small that they are often included within other communities (C. Reschke personal communication 1999, M. Smith personal communication 1999).

MOST ABUNDANT SPECIES

Isle Royale National Park

Stratum	Species
Tall shrub	*Corylus cornuta, Empetrum nigrum Empetrum nigrum, Sorbus decora*
Short shrub	*Diervilla lonicera, Amelanchier* spp.
Forb	*Aster macrophyllus, Hieracium piloselloides*

Globally

Stratum	Species
Tall shrub	*Corylus cornuta,*
Short shrub	*Diervilla lonicera, Amelanchier* spp.
Forb	*Aster macrophyllus, Hieracium piloselloides*

CHARACTERISTIC SPECIES

Isle Royale National Park

Corylus cornuta, Empetrum nigrum Empetrum nigrum, Sorbus decora

Globally

Corylus cornuta, Diervilla lonicera, Amelanchier spp., *Hieracium piloselloides*

VEGETATION DESCRIPTION

Isle Royale National Park

This boreal rocky shrubland is a deciduous shrubland with variable physiognomy and composition. This community often has a sparse tree layer, with about 5 to 20% cover of trees over 5 m tall; the most common trees are *Picea glauca, Populus tremuloides*, and *Sorbus decora*. The tall shrub layer varies from 0 to 70% cover; the most abundant tall shrubs are

Corylus cornuta, Crataegus douglasii, Picea glauca, Prunus pensylvanica, and *Sorbus decora.* The short shrub layer (including dwarf shrubs) varies from about 10 to 80% cover; the most abundant short shrubs are *Diervilla lonicera, Amelanchier* sp., *Rubus parviflorus, Juniperus communis, Rubus idaeus, Rosa acicularis*, and *Arctostaphylos uva-ursi.* The herb layer varies from 5 to 80% cover; the most abundant herbs are *Aster macrophyllus, Hieracium piloselloides, Clinopodium vulgare, Poa compressa, Danthonia spicata*, and *Pteridium aquilinum*. The cover of nonvascular plants varies from about 5 to 60%, with lichens (including *Cladina* spp.), and mosses.

Globally
The vegetation is dominated by shrubs, with a strong graminoid layer. Dominant shrubs include *Amelanchier* spp., *Corylus cornuta*, and *Prunus virginiana.* Other shrubs include *Acer spicatum, Juniperus communis, Rosa acicularis*, and *Rhus typhina.* Associated herbs include *Danthonia spicata, Hieracium* spp., and *Poa compressa.* This community often has a sparse tree layer, with about 5 to 20% cover of trees over 5 m tall. The species are quite variable, but the most common trees are *Picea glauca* and *Populus tremuloides.* The tall shrub layer varies from 0 to 70% cover. At Isle Royale National Park, the most abundant tall shrubs are *Corylus cornuta*, *Crataegus douglasii, Picea glauca, Prunus pensylvanica*, and *Sorbus decora*; the short shrub layer (including dwarf shrubs) varies from about 10 to 80% cover, with the most abundant short shrubs being *Diervilla lonicera, Amelanchier* sp., *Rubus parviflorus, Juniperus communis, Rubus idaeus, Rosa acicularis*, and *Arctostaphylos uva-ursi.* At Voyageurs National Park the tall shrub layer contains *Acer spicatum, Populus tremuloides, Corylus cornuta,* and/or *Abies balsamea*; where the canopy of tall shrubs is more open, short shrubs such as *Rubus strigosus, Rubus pubescens, Taxus canadensis* and *Juniperus communis* exist at low to moderate cover. On Isle Royale the herb layer varies from 5 to 80% cover; the most abundant herbs are *Aster macrophyllus, Hieracium piloselloides, Clinopodium vulgare, Poa compressa, Danthonia spicata*, and *Pteridium aquilinum*. The cover of nonvascular plants varies from about 5 to 60% cover, with lichens (including *Cladina* spp.), and mosses. At Voyaguers, the density and composition of the herbaceous strata is highly variable. The most common species include *Aster macrophyllus, Pteridium aquilinum,* and *Polygonum cilinode.* On wetter sites, herbaceous species such as *Calamagrostis canadensis and Scirpus cyperinus* may dominate. (C. Reschke personal communication 1999, M. Smith personal communication 1999).

OTHER NOTEWORTHY SPECIES
Isle Royale National Park
Information not available.

CONSERVATION RANK G?.

DATABASE CODE CEGL005197

MAP UNITS 29

COMMENTS
Globally
This community often has evidence of past fires; it can be a successional stage following a severe burn. It seems to be an intermediate successional stage after Poverty grass barrens that may gradually develop into a woodland. Soils are often very shallow, and successional development is very slow on the exposed rocky summits where this community is found; so the community may be a fairly long-lived and stable successional stage (C. Reschke personal communication 1999). This type can also arise after logging has removed the tree canopy. In these circumstances, the shrubs are typically dense *Populus tremuloides* saplings. This community is also common on slopes above beaver ponds where beaver have removed all or most of the tree canopy. In these situations, the shrubs are usually dense *Corylus cornuta* and *Acer spicatum.* Finally this type can also occur on ridge tops, high slopes and other places where high winds have blown down the trees in the canopy (M. Smith personal communication 1999).

REFERENCES